# MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT TITLE V OPERATING PERMIT EVALUATION REPORT

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Dated: May 29, 1997

#### APPLICATION RECEIVED FROM:

Trical, Inc. P.O. Box 1327 Hollister, CA 95024

# PLANT SITE LOCATION:

8770 Highway 25 Hollister, California

#### APPLICATION PROCESSED BY:

Mike Sewell, Air Quality Engineer

Nature of Business: Formulation and Packaging of Soil Fumigants

SIC Code: 2879 - Pesticides and Agricultural Chemicals

# **RESPONSIBLE OFFICIAL:**

Name: Mr. Hank Maze Title: Controller Phone: (408) 637-0195

# FACILITY CONTACT PERSON:

Name: Mr. Hank Maze Title: Controller Phone: (408) 637-0195

# TABLE OF CONTENTS

FACILITY DESCRIPTION	. 3
EQUIPMENT DESCRIPTION	. 3
APPLICABLE FEDERAL REQUIREMENTS	. 3
FEDERALLY ENFORCEABLE EMISSION LIMITS AND STANDARDS	. 6
TESTING REQUIREMENTS AND PROCEDURES	. 6
RECORD KEEPING REQUIREMENTS	. 7
REPORTING REQUIREMENTS	. 8
GENERAL CONDITIONS	. 8

#### **FACILITY DESCRIPTION**

Trical's Bolsa facility is a fumigant formulation and packaging operation. Trical formulates mixtures of methyl bromide, chloropicrin, and telone (1,3-dicloropropene) for use in the agricultural and structural pest control markets.

The chemicals are received in bulk by rail tanker, tank truck and cylinders. The chemicals are transferred under pressure into bulk storage tanks or into smaller cylinders for resale. In addition to the chemical storage, formulation, and packaging operations, the facility has a enclosed shot blaster for removing paint from the cylinders and a paint spraying operation for coating the cylinders.

Trical is considered a federal Major Source and subject to the Title V permitting program due to the potential to emit (PTE) methyl bromide. Methyl bromide is listed as a Hazardous Air Pollutant (HAP) under Title III of the Clean Air Act. The PTE methyl bromide from the facility exceeds the 10 ton per year (TPY) major source threshold for a single HAP. This major source determination was based upon information supplied to the District in the facility's AB 2588 (Air Toxics Hot Spots Information and Assessment Act) submittal which reported 10.5 TPY of methyl bromide emissions from the facility for calendar year 1991.

#### **EQUIPMENT DESCRIPTION**

FUMIGANT STORAGE, FORMULATION AND PACKAGING FACILITY CONSISTING OF:

- 1. Railcar And Stationary Storage Tanks, With Associated Piping Systems, Pumps, Etc. For The Transfer Of Fumigants Between Tanks And The Fumigant Filling Stations.
- Fumigant Filling Stations Located Under Ventilation Hood, Equipped With Hoses And Attachments For Filling Fumigant Cylinders.
- 3. Cylinder Paint Scrubbing Operation, Enclosed Steel Shot Blaster Venting To A Baghouse.
- 4. Paint Spray Booth, Industrial Type Paint Spray Booth With Exhaust Filters.

# APPLICABLE FEDERAL REQUIREMENTS

#### Rule 207 - Review of New or Modified Sources

This facility did not trigger the NSR process during the issuance of their local permits. The application was dated April 19, 1978 which established the BACT trigger level of a net emission increase of 200 lbs/day. Even though the facility did not trigger NSR, the District determined that the fumigant packaging operation as proposed was BACT. The rule requirements did not establish any emissions limits for the facility, and therefore, no limits from Rule 207 will be included on the Title V permit.

#### Rule 218 - Title V: Federal Operating Permits

This is the implementing regulation by which the District issues the federal Operating Permits. All

requirements imposed by this rule will be included in the Title V permit.

# Rule 308 - Title V: Federal Operating Permit Fees

This is the District's fee rule for Title V. Appropriate conditions will be included on the Title V permit to ensure compliance with the fee provisions contained in this rule.

#### Rule 400 - Visible Emissions

This rule is applicable to the emissions from the facility. No visible emissions are expected from facility operations because: 1) the fumigants formulated and packaged are colorless, 2) the shot blasting of the cylinders has a integral baghouse to eliminate particulate emissions, and 3) the paint spraying operation is conducted in a paint booth with particulate filters.

An appropriate condition will be included on the permit to ensure compliance with this rule, but no specific testing will be required to verify compliance with this opacity requirement.

#### Rule 403 - Particulate Matter

The 0.15 grains per dry cubic foot emission standard is applicable to the shot blaster and the paint spraying operation at this facility and will be included on the permit.

Shot Blaster - Based upon the fact that this equipment is a closed system vented to a baghouse with an exhaust rate of 1,100 CFM, the shot blaster would be allowed emissions of 1.4 Lbs PM/hour under this rule [(0.15 grains/dscf)(1100 cfm)(1 lb/7000 grains)(60 min/hour) = 1.4 lbs PM/hour]. Assuming a 99% efficiency for the bag house, this would equate to a particulate generation of 140 lbs PM/hour within the shot blaster [((1.4 lbs PM $_{10}$ /hr)/(1-0.99)) = 140 lbs PM/hour]. Based upon the fact that it takes 4 minutes to blast each cylinder, the maximum number of cylinders which could be blasted in one hour would be 15; to exceed the 140 lbs PM/hour generation in the shot blaster would require that the blasting of each cylinder generate 9.3 lbs of PM. It would be impossible to generate 9.3 lbs of PM from blasting a cylinder as each cylinder is coated with less than a quart of paint which would equate to at most 3 lbs and assuming the consumption of less than 1 lb of steel shot per hour of operation [(3 lbs/cylinder)(15 cylinders)+(1 lb steel shot consumed/hr)(1 hr/60 min)(4 min/cylinder = 3.1 lbs/cylinder] Therefore, no testing for grain loading from the shot blaster will be required as compliance is assured from the above calculation.

Paint Spray Operation - Based upon the fact that this booth has an exhaust rate of 3,625 CFM, the paint booth would be allowed emissions of 4.7 Lbs PM/hour under this rule [(0.15 grains/dscf)(3625 cfm)(1 lb/7000 grains)(60 min/hour) = 4.7 lbs PM/hour]. Assuming a 25% transfer efficiency for painting the cylinders and a 90% efficiency for the spray booth filters, this would equate to spraying 62.7 lbs PM/hour sprayed in the booth [((4.7 lbs PM/hr)/(1-0.90)(1-0.25)) = 62.7 lbs PM/hour]. Assume the use of a 10 lbs/gallon coating with 7.5 lbs solids/gallon would require that 8.4 gallons of coating be sprayed in one hour to exceed the particulate matter limit from this rule. It is impossible for this cylinder painting operation to spray 8.4 gallons of paint in one hour. Therefore, no testing for grain loading from the paint booth will be required as compliance is assured from the above calculation.

#### Rule 416 - Organic Solvents

This rule has specific emission limits and recordkeeping requirements for photochemically reactive and non-photochemically reactive solvents. This rule applies to the fumigant packaging and paint spray operation at this facility.

The fumigants formulated and packaged are not photochemically reactive. Therefore, the fumigant formulation and packaging operations are limited to the 3,000 pound per day and 450 pound per hour limit for non-photochemically reactive solvent containing material. These materials are packaged for sale and any emission releases are lost profits for the facility. Therefore, the fumigant formulation and packaging operation is assumed to be in compliance with the rule requirements.

Historically, daily material usage records of the paint spraying operation show that the facility has been operating below the 40 pound per day limit for photochemically reactive solvents and the 3,000 pound per day limit for non-photochemically reactive solvents. Compliance with the 8 pound per hour limit for photochemically reactive solvents and the 450 pound per hour limit for non-photochemically reactive solvents is assumed based upon the limited material usage at the facility.

Appropriate conditions will be included on the permit to ensure compliance with the provisions of this rule.

# Rule 417 - Storage of Organic Liquids

This rule requires vapor loss control devices on stationary organic storage tanks with a capacity of greater than 39,360 gallons if the organic liquid stored has a true vapor pressure of 1.5 psi at actual storage conditions. Of the three compounds stored (methyl bromide, chloropicrin, and telone), only methyl bromide has a vapor pressure greater than 1.5 psi at actual storage conditions.

Each of the storage tanks presently at the facility have a nominal capacity of 10,000 gallons, therefore this rule is not applicable to this facility.

The facility has plans to install three 35,000 gallon telone storage tanks. The installation of these three tanks will also be exempt from the requirements of this rule based upon the tank capacity and the vapor pressure of the product stored.

#### Rule 434 - Coating of Metal Parts and Products

This rule has a 3.5 lb/gallon VOC content limit for coatings applied to metal parts and products when applying greater than 55 gallons per year to metal parts and products, and exempts a source complying with the requirements of this rule from the requirements of Rule 416 (Organic Solvents). Historical operations at the facility have been in compliance with the requirements of this rule, continued compliance is expected.

Appropriate conditions will be included on the permit to ensure compliance with the provisions of this rule.

40 CFR Part 68 - Risk Management Planning: Accidental Release Prevention (Section 112r) In their application, Trical stated that they store, or otherwise handle, greater than the threshold quantities of substances listed in Section 112(r). The application is incorrect, as the three fumigants packaged at the facility (methyl bromide, chloropicrin, and telone) are not substances listed in Section 112(r). Therefore, Trical is not required to prepare a federal Risk Management Plan (RMP) pursuant to Section 112(r).

To ensure compliance with 112(r) for future operations, a condition will be added to the permit requiring the submittal of an RMP should the facility become subject to Section 112(r).

#### THE FOLLOWING CONDITIONS WILL BE INCLUDED ON THE TITLE V PERMIT:

#### FEDERALLY ENFORCEABLE EMISSION LIMITS AND STANDARDS

- 1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three (3) minutes in any one (1) hour which is as dark or darker than Ringelmann 1 or equivalent 20% opacity. [District Rule 400]
- 2. Particulate matter shall not exceed 0.15 grains per standard dry cubic foot in any exhaust stream. [District Rule 403]
- 3. No more than 40 pounds per day, nor more than 8 pounds per hour of photochemically reactive solvent containing materials, as defined in District Rule 416, shall be discharged from the Paint Spray Facility. [District Rule 416]
- 4. No more than 3,000 pounds per day, nor more than 450 pounds per hour of non-photochemically reactive solvent containing materials, as defined in District Rule 416, shall be discharged from the Fumigant Packaging Operation or the Paint Spray Booth. [District Rule 416]
- 5. If total combined usage of coatings applied to metal parts and products, as defined by District Rule 434, equals or exceeds 55 gallons per year, each coating used for metal parts and products must not exceed the following volatile organic compound (VOC) content limits [District Rule 434]:

	VOC Content Limit, As Applied	
Coating Category	grams/liter	lb/gal
Pretreatment Wash Primer	780	6.5
All Other Coatings	420	3.5

6. Should the facility, as defined in 40 CFR §68.3 become subject to Part 68, then Trical shall submit a risk management plan (RMP) by the date specified in 40 CFR §68.10. Once subject to Part 68, Trical shall certify compliance with these requirements as part of the annual compliance certification required by 40 CFR Part 70 and this permit. [40 CFR Part 68]

### **TESTING REQUIREMENTS AND PROCEDURES**

7. No testing is specified for the generic (Rule 400) opacity requirement from condition number 1. This equipment is assumed to be in compliance with the opacity requirement based upon the information contained in the engineering evaluation. If testing is conducted for condition number 1, Trical should conduct testing in accordance with the methodology contained in EPA Method 9 and the averaging/aggregating period contained in District Rule 400. [District Rule 218]

8. No testing is specified for the generic (Rule 403) particulate matter emission standard from condition number 2. This equipment is assumed to be in compliance with the particulate matter emission standard based upon the information contained in the engineering evaluation. If testing is conducted for condition number 2, Trical should conduct testing in accordance with the methodology contained in EPA Method 5. [District Rule 218]

#### RECORD KEEPING REQUIREMENTS

- 9. Trical shall maintain a daily log of the fumigant formulation and packaging operations with calculated fumigant emission release calculations to verify compliance with condition 3. [District Rule 218]
- 10. Trical shall maintain a daily log which records the amount and type of solvent containing material consumed in the paint spray booth to verify compliance with conditions 3 and 4. [District Rule 218]
- 11. Trical shall maintain monthly records sufficient to verify compliance with condition 5. These records shall contain at a minimum: the types of all coatings used; the name of each coating and manufacturer; the VOC content of each coating; the VOC, water and exempt compound content of reducers; and the mix ratio of coatings and reducers. [District Rule 434]
- 12. As applicable Trical shall maintain the following general records of required monitoring information [District Rule 218]:
  - A) the date and time of sampling or measurements;
  - B) the date(s) analyses were performed;
  - C) the company or entity that performed the analyses;
  - D) the analytical techniques or methods used;
  - E) the results of such analyses;
  - F) the operating conditions existing at the time of sampling or measurement; and
  - G) the records of quality assurance for continuous monitoring systems (including, but not limited to quality control activities, audits, and calibration drift checks) and source testing methods.
- 13. Trical shall maintain records on the occurrence and duration of any start-up, shutdown, or malfunction in the operation of the equipment under this permit. [District Rule 218]
- 14. Trical shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring, sample collection, measurement, report, and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [District Rule 218]

#### REPORTING REQUIREMENTS

15. Trical shall submit semiannual monitoring reports to the District, in a District approved format, no later than August 15 for the period of January 1 through June 30 and no later than February 15 for the period of July 1 through December 31. [District Rule 218]

These monitoring reports shall include at a minimum:

- the time intervals, date and magnitude of excess emissions, nature and cause of the excess (if known), corrective actions and preventative measures adopted; and
- B) the averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant in question; and
- C) all information pertaining to any monitoring as required by the permit; and
- D) a negative declaration specifying when no excess emissions occurred.
- 16. Trical shall submit an annual compliance certification report to the District and U.S. EPA, in a District approved format, no later than February 15 for the period of January 1 through December 31 of the preceding year. [District Rule 218]

This report shall include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report and shall include at a minimum:

- identification of each term or condition of the permit that is the basis of the certification; and
- B) the compliance status; and
- C) whether compliance was continuous or intermittent; and
- D) the method(s) used for determining the compliance status of the source, currently and over the reporting period.

#### **GENERAL CONDITIONS**

- 17. Trical shall comply with all conditions of this federal operating permit. Any noncompliance with a permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [District Rule 218]
- 18. In an enforcement action, the fact that Trical would have to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit is not a defense. [District Rule

218]

- 19. This permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by the District. The filing of a request by Trical for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 218]
- 20. This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. [District Rule 218]
- 21. Trical shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, Trical shall also furnish to the District copies of records required to be retained by this permit. [District Rule 218]
- 22. For applicable requirements that will become effective during the permit term, Trical shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [District Rule 218]
- 23. Any document submitted to the District pursuant to this permit shall contain certification by the responsible official of truth, accuracy and completeness. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Trical shall promptly, upon discovery, report to the District a material error or omission in these records, reports, plans, or other documents. [District Rule 218]
- 24. Trical shall report any violation of any requirement contained in this permit to the District within 96 hours after such occurrence. The violation report shall include the time intervals, date and magnitude of excess emissions; nature and cause of the excess (if known), corrective actions and preventive measures adopted. [District Rule 218]
- 25. Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, record keeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with. [District Rule 218]
- 26. For this federal operating permit to remain valid through the permit term of five years from the date of issuance, Trical shall pay an annual emission fee based upon the requirements of District Rule 308. [District Rule 218]
- 27. Trical shall have available at the facility at all times a copy of this federal operating permit.

#### [District Rule 218]

- 28. For protection from enforcement action based upon an emergency, as defined in District Rule 218, the responsible official for Trical shall submit to the District relevant evidence which demonstrates [District Rule 218]:
  - A) an emergency occurred; and
  - B) that Trical can identify the cause(s) of the emergency; and
  - C) that the facility was being properly operated at the time of the emergency; and
  - D) that all steps were taken to minimize the emissions resulting from the emergency; and
  - E) within two working days of the emergency event, Trical provided the District with a description of the emergency and any mitigating or corrective actions taken.
- 29. Upon presentation of credentials, Trical shall allow the District, the ARB, the EPA, or an authorized representative, to perform the following [District Rule 218]:
  - enter upon the premises where the federal operating permit source is located or in which any records are required to be kept under the terms and conditions of this federal operating permit;
  - B) to have access to and copy any records required to be kept under the terms and conditions of this federal operating permit;
  - c) to inspect any equipment, operation, or process described or required in this federal operating permit; and,
  - D) to sample emissions from the source.

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